



UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and
Information Administration
Washington, D.C. 20230

AUG 10 2010

Ms. Mindel De La Torre
Chief of the International Bureau
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Ms. De La Torre:

The National Telecommunications and Information Administration (NTIA), on behalf of the Executive Branch agencies, approves the release of draft Executive Branch proposals for WRC-12 agenda items 1.10 (Resolution 357) and 1.14.

NTIA considered the Federal agencies' input toward the development of U.S. proposals for WRC-12. NTIA forwards this package for consideration and review by your WRC-12 Advisory Committee. Dr. Darlene Drazenovich is the primary contact from my staff.

Sincerely,

Karl B. Nebbia
Associate Administrator
Office of Spectrum Management

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.10: *to examine the frequency allocation requirements with regard to operation of safety systems for ships and ports and associated regulatory provisions, in accordance with Resolution 357 (WRC-07)*

Background Information: The ITU-R intends to address several essential maritime issues at WRC-12 under agenda item 1.10. The technical, operational, procedural work and studies, for certain maritime issues proved to be too complex to reach a satisfactory stage for any conclusive action by WRC-12.

These issues include:

1. the next generation of the Global Maritime Distress and Safety System (GMDSS);
2. implementation of E-Navigation (eNAV), which is the harmonized creation, collection, integration, exchange, and presentation of maritime information onboard and ashore by electronic means to enhance berth to berth navigation and related services, for safety and security at sea and protection of the marine environment;
3. mesh networking for improved safety communications in the maritime environment; and
4. container and cargo identification systems to support global commerce and enhanced port security

These remaining topics in the global maritime community require continued study within the ITU-R in an effort to reach a resolution at a future WRC. Modification at WRC-12 to Resolution 357 (WRC-07) is necessary to continue studies within the ITU-R and reach conclusion on the subjects noted above.

Proposal:

MOD USA/1.10/1

RESOLUTION 357 (WRC-12)

**Consideration of regulatory provisions and spectrum allocations for use
by enhanced maritime safety systems for ships and ports**

The World Radiocommunication Conference (Geneva, 20072012),

considering

- a) that there is increasing need, on a global basis, to enhance ship and cargo identification, tracking, and surveillance as well as ship and port security and safety;
- b) that the International Maritime Organization (IMO) adoption of the International Ship and Port Facility Security (ISPS) Code, specifically Safety of Life at Sea (SOLAS) Convention, Chapter XI-2, on special measures to enhance maritime security, requires long-range spectrum dependent systems;
- c) that the introduction of the shipborne universal automatic identification system (AIS) supports maritime safety and offers potential enhancements to ship and port security and maritime safety;
- d) that the IMO will propose modernization of Global Maritime Distress and Safety System (GMDSS)~~that studies within ITU-R indicate that additional AIS channels in the mobile-satellite service may be required to enhance and accommodate global ship tracking capabilities;~~
- e) that new systems will harmonize creation, collection, integration, exchange and presentation of maritime information onboard and ashore by electronic means to enhance berth to berth navigation and related services, for safety and security at sea and protection of the marine environment~~that advanced maritime HF data systems may be used to deliver security alerts and safety information to, and to receive similar information and long-range identification and tracking (LRIT) information from, ships in global regions not under satellite coverage;~~
- f) that use of existing maritime mobile allocations, where practicable, for ship and port security and enhanced maritime safety would be preferable, particularly where international interoperability is required;
- g) that additional studies within ITU-R on spectrum efficient radio technologies may be required to resolve these multifaceted spectrum requirements;
- ~~h) — that requirements for ITU Service Publications and specific revisions of content, format and structure of those publications may be required to support maritime security and safety systems;~~

noting

~~a) a)~~ — Resolution 342 (Rev.WRC-2000): “New technologies to provide improved efficiency in the use of the band 156-174 MHz by stations in the maritime mobile service”;

~~b)~~ IMO Maritime Safety Committee Circular 1056: Guidelines for Ships Operating in Arctic Ice-Covered Waters,

~~b)~~ — Resolution 351 (Rev.WRC-07): “Review of the frequency and channel arrangements in the HF bands allocated to the maritime mobile service contained in Appendix 17 with a view to improving efficiency through the use of new digital technology by the maritime mobile service”;

recognizing

a) that there is a global requirement to enhance maritime safety, ship and port security via spectrum dependent systems;

~~b)~~ — ~~that existing and future technologies for Ship Security and Alerting Systems (SSAS), introduced as a result of the ISPS Code referred to in considering b), will require long-range communication links and networks between mobile ships and shore-based stations;~~

~~be)~~ that due to the importance of these radio links in ensuring the safe and secure operation of international shipping and commerce, they must be resilient to interference;

~~cd)~~ that studies will be required to provide a basis for considering regulatory changes, including additional allocations and recommendations, designed to accommodate spectrum requirements of ship and port security, consistent with the protection of incumbent services;

~~de)~~ that the ITU and international standards organizations have initiated related studies on spectrum efficient technology;

~~e)~~ that IMO has established new NAVAREAs in the Arctic regions and there is a need for improved GMDSS communications in the Arctic,

resolves

1 that WRC-16~~+~~ consider amendments to provisions of the Radio Regulations necessary to provide for the operation of ship and port security and maritime safety systems;

2 that WRC-16~~+~~ consider additional allocations to the maritime mobile service ~~below 1-GHz~~ to support the requirements identified in *resolves* 1;

~~3~~ — ~~that WRC-11 consider additional allocations to the maritime mobile satellite service in frequency bands allocated to the maritime mobile service between 156 and 162.025 MHz to support the requirements identified in resolves 1,~~

invites ITU-R

1 to conduct, as a matter of urgency, studies to determine the spectrum requirements and potential frequency bands suitable to support ship and port security and enhanced maritime safety systems;

2 that the studies referred to in *invites ITU-R 1* should include the applicability of spectrum efficient technologies, and sharing and compatibility studies with services already having allocations in potential spectrum for ship safety and port security systems,

invites

all members of the Radiocommunication Sector, the International Maritime Organization (IMO), International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), and the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) to contribute to these studies,

instructs the Secretary-General

to bring this Resolution to the attention of IMO, ISO, IEC, IALA and other international and regional organizations concerned.

Reasons: It is necessary to modify Resolution **357 (WRC-07)** to continue the technical, operational and procedural work and studies to address several essential maritime issues under WRC-12 agenda item 1.10.

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.14: *to consider requirements for new applications in the radiolocation service and review allocations or regulatory provisions for implementation of the radiolocation service in the range 30-300 MHz, in accordance with Resolution 611 (WRC-07)*

Background Information: Resolution 611 (WRC-07) resolves to consider a new primary allocation to the radiolocation service for new applications in a portion of 30-300 MHz, with bandwidths no larger than 2 MHz. The results of ITU-R studies should confirm compatibility with existing services and applications in the bands where the new radiolocation service plans to operate. The ITU-R studied technical characteristics, protection criteria, and other factors to determine whether radiolocation systems could operate compatibly with systems operating in accordance with Article 5 of the Radio Regulations.

The 30-300 MHz band is allocated to and used by a wide variety of services, including the fixed, mobile, aeronautical mobile (R), aeronautical radionavigation, broadcasting, and amateur services, as well as a range of space services. For example, the maritime mobile service utilizes safety channels for aircraft Search and Rescue (SAR) operating on channels 16 (156.800 MHz \pm 37.5 kHz) and 70 (156.525 MHz \pm 12.5 kHz) and the aircraft SAR and satellites operating on Automatic Identification System (AIS) channels AIS 1 (161.975 MHz \pm 12.5 kHz) and AIS 2 (162.025 MHz \pm 12.5 kHz), and there are space research and satellite service allocations in the 137-138 MHz, 148-149.9 MHz and 149.9-150.05 MHz bands.

Based on contributions to ITU-R meetings and other regional groups, the primary frequency band of interest within the ITU-R is 154-156 MHz. The new allocation would support applications in the radiolocation service for aerospace surveillance, tracking and maneuvering spacecrafts. Contributions to the ITU-R have not effectively demonstrated compatibility with primary services in or adjacent to the 154-156 MHz range (particularly in the adjacent bands that effect safety and distress applications). ITU-R studies have not shown compatibility with existing services. Also, additional compatibility studies may be necessary to ensure that the primary services for amateur broadcasting and amateur satellites operating globally will not encounter unacceptable interference.

Within Region 2, several primary radiolocation allocations exist within the 30-300 MHz range and any additional allocation may create unacceptable interference with existing services and hinder future technological development and efficient spectrum use.

The proposed “no change” to Article 5 of the Radio Regulations covers Region 2 only and will ensure protection to services and systems within Region 2. Conversely, it may be appropriate for WRC-12 to consider a country specific footnote within the 154-156 MHz range in order to accommodate future radiolocation services without changing the Table of Frequency Allocations of the Radio Regulations.

Proposal:

NOC

USA/AI1.14/1

ARTICLE 5

Frequency Allocations

Section IV – Table of Frequency Allocations

Reasons: No change to the Radio Regulations in Region 2 is necessary, as there are several existing primary radiolocation allocations within the 30-300 MHz range. Compatibility studies regarding existing primary services, particularly the safety and distress services, mobile-satellite service, fixed-satellite service, and the amateur service, need further inquiry to be confident that unacceptable interference will not occur.

SUP

USA/AI1.14/2

RESOLUTION 611 (WRC-07)

Use of a portion of the VHF band by the radiolocation service

Reasons: Consequential to completion of agenda item 1.14 at WRC-12.